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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,002	07/21/2003	Hideobu Mikami	1007-020	5624
47888	7590	12/02/2008		
HEDMAN & COSTIGAN P.C. 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036			EXAMINER GOLOBY, JAMES C	
			ART UNIT 1797	PAPER NUMBER
			MAIL DATE 12/02/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/624,002

**Applicant(s)**

MIKAMI ET AL.

**Examiner**

James Goloboy

**Art Unit**

1797

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 7, 11-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 7, 11-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 9/5/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 9/10/08 has been entered.

***Claim Rejections - 35 USC § 103***

2. Claims 1, 3, 7, 11-12, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kageyama (JP 1-259097) in view of Wulfers (U.S. Pat. Bo. 4,113,640).

The English-language abstract of Kageyama, submitted by applicant with the IDS of 9/5/08, and the Derwent abstract, which is attached, have been used in setting forth this rejection. Kageyama discloses a grease comprising an alkyldiphenyl ether oil and a diurea thickener having a structure meeting the limitations of claim 1. The alkyldiphenyl ether oil and diurea thickener are present in amounts overlapping the ranges recited in claim 1, and the composition does not contain ester oil. The base oil can contain polyalphaolefins, a synthetic hydrocarbon as recited in claim 3. The R groups recited in claim 7 are within the scope of the ranges recited for the R groups in the thickener of

Kageyama. When the base oil consists solely of alkyldiphenyl ether the composition meets the limitations of claim 14. The difference between Kageyama and the currently presented claims is that Kageyama does not disclose a composition comprising sodium sebacate or antioxidant.

Wulfers, in column 1 lines 9-15, discloses urea-thickened greases. From column 4 line 66 through column 5 line 10 Wulfers discloses that the composition can contain sodium sebacate as a corrosion inhibitor. In Table 1 Wulfers discloses formulations containing 1% by weight of sodium sebacate, within the range recited in claims 1 and 15. The compositions of Table 1 also contain 1% of by weight of Irganox LO-4 and LO-6, which are amine-based antioxidants meeting the limitations of claims 11-12 and 15. The addition of sodium sebacate and antioxidant to the composition of Kageyama meets the limitations of claims 1, 3, 11-12, and 14-15.

It would have been obvious to one of ordinary skill in the art to include the sodium sebacate and antioxidant of Wulfers in the grease composition of Kageyama in order to impart antirust and antioxidation properties to the composition.

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kageyama in view of Wulfers as applied to claims 1, 3, 11-12, and 14-15 above, and further in view of Minami (JP 08-176578).

The discussion of Kageyama and Wulfers in paragraph 2 above is incorporated here by reference. Kageyama and Wulfers discloses a grease meeting the limitations of claim 1 but not a bearing containing the grease.

An English machine translation of Minami, which is attached, has been used in setting forth this rejection. Minami, in paragraph 1, discloses a sealed bearing containing a grease, and in paragraph 9 discloses that the grease comprises an alkyldiphenyl ether and a urea thickener, similar to the grease of Kageyama and Wulfers.

It would have been obvious to one of ordinary skill in the art to use the grease of Kageyama and Wulfers in a sealed bearing, as Minami teaches that urea-thickened greases based on alkyldiphenyl ether oils are suitable lubricants for such bearings.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Goloboy whose telephone number is (571)272-2476. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCG

/Glenn A Caldarola/  
Acting SPE of Art Unit 1797